

Crathco Powdered Beverage Dispensers

Operation and Instruction Manual

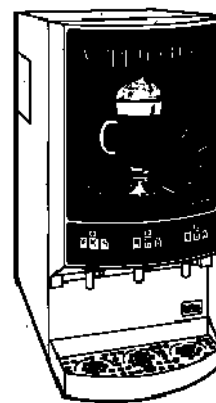
for

PIC (1, 2, & 3) DC, PSD (1, 2, & 3) DC & PIC-33A Series

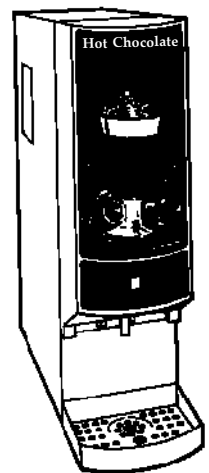
TABLE OF CONTENTS

Warning Labels.....	2
Installation.....	3
Start up Procedures.....	3-4
How To Dispense Cappuccino.....	4
Adjustments.....	5-7
Service and Cleaning.....	7-11
Troubleshooting.....	12-13
Exploded Views.....	14-21
Wiring Diagram.....	22-26

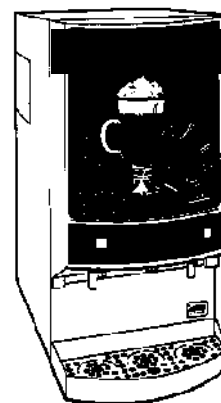
***Prior authorization must be obtained
from Grindmaster Crathco Systems for
all warranty claims.***



PIC-33A



PIC-1-DC



PIC-2-DC



Grindmaster Crathco Systems, Inc.
4003 Collins Lane
Louisville, Kentucky 40245
(502) 425-4776 800-695-4500
(800) 568-5715 (technical service only)
FAX (502) 425-4664
www.grindmaster.com

Warning Labels

The following warning labels were on your dispenser when it was shipped from the factory. They should remain on your dispenser in good, readable condition at all times. If one of your labels is missing or damaged, order a replacement label immediately.

Part #62337, Located on the upper splash panel on the front of the dispenser

	⚠ WARNING Contents can cause severe burns if handled improperly. Cup must rest flat on tray with 1/4" (6mm) clearance between cup and spout.
	⚠ AVISO EL CONTENIDO PUEDE CAUSAR QUEMADURAS SI SE USA INCORRECTAMENTE. LA TAZA DEBE ESTAR DERECHA EN LA BANDEJA CON 6MM (1/4") DE DISTANCIA ENTRE LA TAZA Y EL TUBO PLASTICO.
	⚠ AVERTISSEMENT Contenu peut provoquer des brulures graves si il est manipule incorrectement. Le gobelet doit etre place a plat sur le plateau tout en maintenant un espace libre de 6mm (1/4") entre le gobelet et le bec verseur.

Part #61321, Located behind the drip pan on the front of the dispenser

⚠ WARNING: Risk of electric shock. Disconnect from power before servicing. Hot parts and surfaces inside and outside machine may cause burns. Tank drain hose inside machine dispenses very hot water. Will cause burns and/or personal injury. Must have five gallon heat resistant container to catch hot water. Hot water may splash. Do not attempt to stop hot water once it begins flowing. Replace plug and clamp prior to refilling tank.

Part #61319, Located on the outside on the back of the dispenser

⚠ WARNING:	⚠ ADVERTENCIA:	⚠ ADVERTISSEMENT:
RISK OF ELECTRIC SHOCK. DISCONNECT FROM POWER BEFORE SERVICING. HOT PARTS AND SURFACES INSIDE MACHINE MAY CAUSE BURNS.	RIESGO DE CHOQUE ELECTRI- CO. DESCONECTE LA MAQUINA DE LA CORRIENTE ANTES DE ARREGLARA. PIEZAS Y SUPERFICES CALIENTES DENTROS DE LA MAQUINA PUEDEN CAUSAR QUEMADURAS.	DANGER DE CHOC ELECTRIQUE. METTRE L'APPAREIL HORS TENSION AVANT DE L'ENTREtenir. DES ELEMENTS ET SURFACES CHAUDS PEUVENT PROVOQUER DES BRULURES. MANIPULER AVEC SOIN.
IMPORTANT CONNECT TO A WATER SUPPLY BEFORE PLUG- GING IN.	IMPORTANTE CONECTE LA MAQUINA A UNA VIA DE AGUA ANTES DE ENCHUFAR- LA.	IMPORTANT RACCORDER L'APPAREIL A LA DISTRIBUTION D'EAU AVANT DE METTRE SOUS TENSION.

Part #61326, Located on the outside on the left of the dispenser

⚠ WARNING:	⚠ ADVERTENCIA:	⚠ ADVERTISSEMENT:
HOT PARTS AND SURFACES MAY CAUSE BURNS.	PIEZAS Y SUPERFICES CALIENTES DENTRO DE LA MAQUINA PUEDEN CAUSAR QUEMADURAS.	DES ELEMENTS ET SURFACES CHAUDS A L'INTERIEUR DE L'AP- PAREIL PEUVENT PROVOQUER DES BRULURES.
ADJUSTMENT INSTRU- CTION ON THE BACK OF THE ACCESS PANEL.	INSTRUCCIONES DE AJUSTE DENTRO DEL PANEL DE ACCE- SO.	CONSIGNES DE REGLAGE AU VERSO DE LA PLAQUE D'ACCES.

Part #61325, Located on the drain hose inside the dispenser

⚠ WARNING: VERY HOT WATER MAY CAUSE BURNS. IMPORTANT: • YOU MUST HAVE A 5 GALLON HEAT RESISTANT CONTAINER TO CATCH HOT WATER. • TO EMPTY HOT WATER FROM TANK REMOVE CLAMP, PINCH THE TUBE AND UNPLUG HOSE. DO NOT ATTEMPT TO STOP WATER ONCE IT BEGINS FLOWING. • REPLACE PLUG AND CLAMP PRIOR TO REFILLING TANK.	⚠ ADVERTENCIA: AGUA MUY CALIENTE PUEDE CAUSAR QUEMADURAS. IMPORTANTE: • UD DEBE TENER UN RESERVORTE RESISTENTE AL CALOR DE CINCO (5) GALONES PARA CATCHAR AGUA CALIENTE. PARA VACIAR EL AGUA CALIENTE DEL TUBO, SQUEZUE LA MANGUERA, ANTES DE QUITAR Y DESCONECTE LA MANGUERA. NO INTENTE DETENER EL AGUA UNA VEZ QUE EMPIEZA A FLUIR. • REEMPLACE EL TAPON Y ELIETE EL TUBO ANTES DE REllenAR EL DEPÓSITO.	⚠ AVERTISSEMENT: L'EAU TRES CHAUDE PEUT PROVOQUER DES BRULURES. IMPORTANT: • IL FAUT UN RESERVOIR RESISTANT AL LA CHALEUR D'UNE CAPACITE DE 5 GALLONS (20 LITRES) POUR RECUEILLIR L'EAU CHAUDE DU RESERVOIR. POUR VIDER LE RESERVOIR, SQUEZUEZ LE SERVIC-JOINT, PINCH LE TUBE ET DECONNECTER LA MANGUERE. NE PAS TENTER D'ARRÊTER L'EAU UNE FOIS QU'ELLE COMMENCE À FLOUER. • REMPLACEZ LE Bouchon ET LE TUBE AVANT DE REPLENIR LE RESERVOIR.	⚠ WARNING: VERY HOT WATER MAY CAUSE BURNS. IMPORTANT: • YOU MUST HAVE A 5 GALLON HEAT RESISTANT CONTAINER TO CATCH HOT WATER. • TO EMPTY HOT WATER FROM TANK REMOVE CLAMP, PINCH THE TUBE AND UNPLUG HOSE. DO NOT ATTEMPT TO STOP WATER ONCE IT BEGINS FLOWING. • REPLACE PLUG AND CLAMP PRIOR TO REFILLING TANK.	⚠ ADVERTENCIA: AGUA MUY CALIENTE PUEDE CAUSAR QUEMADURAS. IMPORTANTE: • UD DEBE TENER UN RESERVORTE RESISTENTE AL CALOR DE CINCO (5) GALONES PARA CATCHAR AGUA CALIENTE. PARA VACIAR EL AGUA CALIENTE DEL TUBO, SQUEZUE LA MANGUERA, ANTES DE QUITAR Y DESCONECTE LA MANGUERA. NO INTENTE DETENER EL AGUA UNA VEZ QUE EMPIEZA A FLUIR. • REEMPLACE EL TAPON Y ELIETE EL TUBO ANTES DE REllenAR EL DEPÓSITO.	⚠ AVERTISSEMENT: L'EAU TRES CHAUDE PEUT PROVOQUER DES BRULURES. IMPORTANT: • IL FAUT UN RESERVOIR RESISTANT AL LA CHALEUR D'UNE CAPACITE DE 5 GALLONS (20 LITRES) POUR RECUEILLIR L'EAU CHAUDE DU RESERVOIR. POUR VIDER LE RESERVOIR, SQUEZUEZ LE SERVIC-JOINT, PINCH LE TUBE ET DECONNECTER LA MANGUERE. NE PAS TENTER D'ARRÊTER L'EAU UNE FOIS QU'ELLE COMMENCE À FLOUER. • REMPLACEZ LE Bouchon ET LE TUBE AVANT DE REPLENIR LE RESERVOIR.
--	---	---	--	---	---

Installation

Water Inlet Connection:

The National Sanitation Foundation requires the following for an NSF approved water hook-up:

1. A quick disconnect water connection or enough coiled tubing so that the machine can be moved for cleaning underneath.
2. An approved backflow prevention device, such as a double check valve to be installed between the machine and water supply. A 1/4" male flare adapter is provided (packed inside drain tray) to be attached by installer to the back of the machine for hook-up to water supply. On units plumbed to permanent water line, installation of a water filter/softener system is recommended to prevent lime and scale build up in the machine. On units pumping from a remote water container, filtered water is recommended to prevent lime and scale buildup in the machine.
3. Water pipe connections and fixtures directly connected to potable water supply shall be sized, installed, and maintained in accordance with Federal, State, and Local codes.

Start-up Procedure for Standard Units:

(Refer to serial tag to verify model number of your machine)

1. Install drain tray in front of machine. Connect the 1/4" male flare fitting (packed in drain tray) to the inlet valve on the back of the machine.
2. Flush the water line to purge any debris from the supply line.
3. Connect a 1/4" water line to the 1/4" male flare connection and turn the water supply on.
Minimum water pressure to the machine: 20 psi
Maximum water pressure to the machine: 120 psi
4. Plug the power cord into a proper electrical outlet.
5. Turn the power switch to the "ON" position and allow the water tank to fill. The machine will make a subtle hissing sound when this occurs. Allow 3-4 minutes for fill time depending on inlet water pressure.
6. After the water tank has filled, allow 30-45 minutes for the water to reach operating temperature depending on wattage and tank size. (Green ready light will illuminate when tank is up to preset temperature).
7. Remove the powder hoppers and fill with desired powder product. IMPORTANT: Check to make sure that the auger inside the hopper is correctly installed prior to filling (see figure F on page 8 for auger installation). Reinstall powder hoppers. Make sure hopper elbows are down.
8. Peel protective film off photo merchandiser cover.

Note: If water supply is allowed to run dry, watchdog timer circuit may disable fill circuit. Ensure adequate water supply for machine then reset machine by turning power switch off 1 second then ON.

Start-Up Procedures for Pump Units (PIC 2-DC & PIC 3-DC only):

(Refer to serial tag to verify model number of your machine)

Note: Pump units are not designed to be plumbed to pressurized water source.

1. Place a full 5 gallon water container within 3 feet vertically and 2 feet horizontally of the machine.
2. Drop the hose at the rear of the machine into the water container (The hose should extend to approximately 1 inch from the bottom of the water container).
Note: Do not let the end of the hose touch the bottom of the container. Shorten the hose if necessary. If you need a longer hose, remove the back access panel, unclamp existing hose, replace with longer hose and replace clamp.
3. Plug the power cord into a proper electrical outlet.
4. Turn the power switch to the "ON" position and allow the water tank to fill. The machine will make a sound when this occurs. Allow 3-4 minutes for fill time.
5. After the water tank has filled, allow 30-45 minutes for the water to reach operating temperature (Green ready light will illuminate when tank is up to preset temperature).
6. Remove the powder hoppers and fill with desired powder product. IMPORTANT: Check to make sure that the auger inside the hopper is correctly installed prior to filling. Reinstall powder hoppers.
7. Peel protective film off photo merchandiser cover.

How to Dispense a Cup of Cappuccino

On models with manual dispense switches:

(Refer to serial tag to verify model number of your machine)

1. Place a cup under the selected drink dispense nozzle.
2. Push and hold dispense switch until cup is 2/3 full and then release switch.

On models starting with PIC-1ADC, PIC-2ADC and PIC-3ADC with portion control dispense switches:

(Refer to serial tag to verify model number of your machine)

1. Place a cup under the selected drink dispense nozzle.
2. Push button for one second, then release to dispense one serving.

Note: Portion may be cancelled by push and release of the switch.

Note: Cup must rest flat on tray with 1/4" (6 mm) clearance between cup and spout. Contents can cause severe burns if handled improperly.

Adjustments

Portion Adjustment

(On models starting with PIC-2A-DC and PIC-3A-DC with portion control dispense switches)

1. Place a cup under the selected drink dispense nozzle.
2. Press and hold the dispense switch.
3. After a 10 second time delay, the machine is triggered into program mode and will begin dispensing.
4. Continue pressing the button until cup is approximately 2/3 full, then release the switch to prevent overflow. The elapsed portion dispense time is saved to memory and will remain until the dispense switch is reprogrammed.
5. Check the portion size by placing an empty cup under the desired dispense nozzle, then press and release the dispense switch. The machine will dispense the preprogrammed portion size.
6. If the portion size is incorrect, repeat steps 1, 2, 3, 4 & 5 until the desired portion size is achieved.

(On models starting with PIC-33A with 3 portion sizes per head.)

1. Place a cup under the selected drink dispense nozzle.
2. Press and hold the S, M, or L button on the touch pad.
(Hold button throughout entire procedure.)
The programming mode will not be activated until you:
3. Press and release the Manual (top-off) button.
After releasing the Manual (top-off) button, the 10-second delay is activated.
4. After 10 seconds, product will begin to dispense.
5. Release the S, M, or L button when cup is approximately 2/3 full.
6. Check the portion size by placing an empty cup under the desired dispense nozzle, then press and release the dispense switch. The machine will dispense the preprogrammed portion size.
7. If the portion size is incorrect, repeat steps 1, 2, 3, 4 & 5 until the desired portion size is achieved.

Three buttons per head are capable of being programmed.

Thermostat Adjustment (Refer to Figure A)

Note: The thermostat range is approximately 160 to 200 degrees Fahrenheit. The tank temperature is factory set at approximately 180°F, making beverage temperature slightly lower than 180 degrees Fahrenheit.

Tool required: #2 Phillips screwdriver.

1. Unplug machine.
2. Remove the drip pan.
3. Remove the upper splash panel on the front of the machine by removing the four Phillips head screws.
4. Locate the thermostat adjustment dial on the left side of the control board. (Refer to Figure A)
5. To adjust the temperature of the water being dispensed, turn the adjustment dial on the control board.
(Turn clockwise to increase the water temperature or counter clockwise to decrease the water temperature)



CAUTION! Do not force the adjustment dial beyond its 270 degrees of rotation or damage to the control board may occur.

Drink Strength Adjustment (Refer to Figure A)

Tools Required: #2 Phillips Screwdriver

Warning: Risk of Electric Shock! Always turn off power to machine while servicing or making internal adjustments to machine.

1. Dispense a drink to determine if drink is too strong or too weak.
2. Turn off power to machine at power switch.
3. Remove upper front splash cover below dispense heads in front of machine.
4. Using a flat head screwdriver, adjust individual dispense heads by rotating appropriate adjustment knob. Turn on power to machine and dispense a drink to determine if drink strength is acceptable. If drink is not acceptable, turn off power to machine and repeat adjustment steps until desired drink strength is achieved. Note: Clockwise rotation will result in a stronger drink and counterclockwise will result in a weaker drink.

Note: Water flow rate is factory preset at approximately 0.80 ounces per second.

CONTROL BOARD FOR PIC3

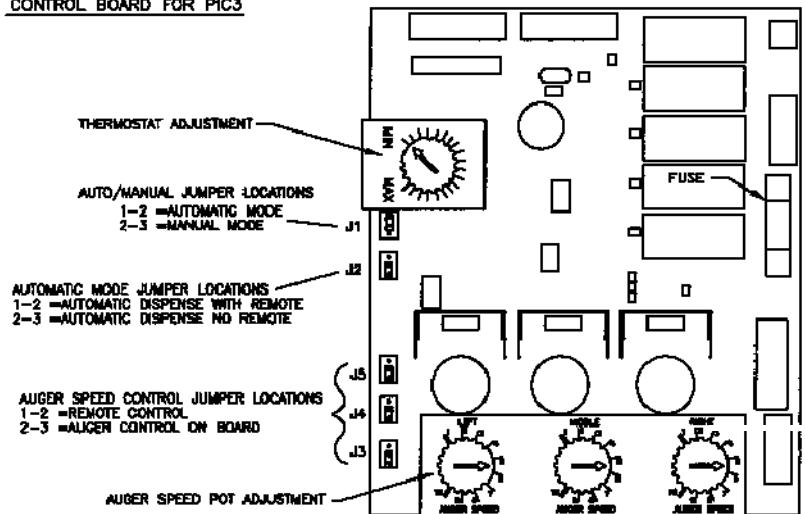
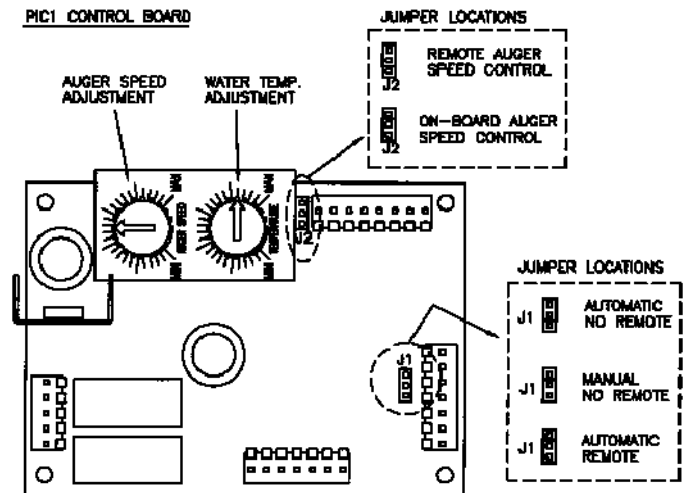


Figure A

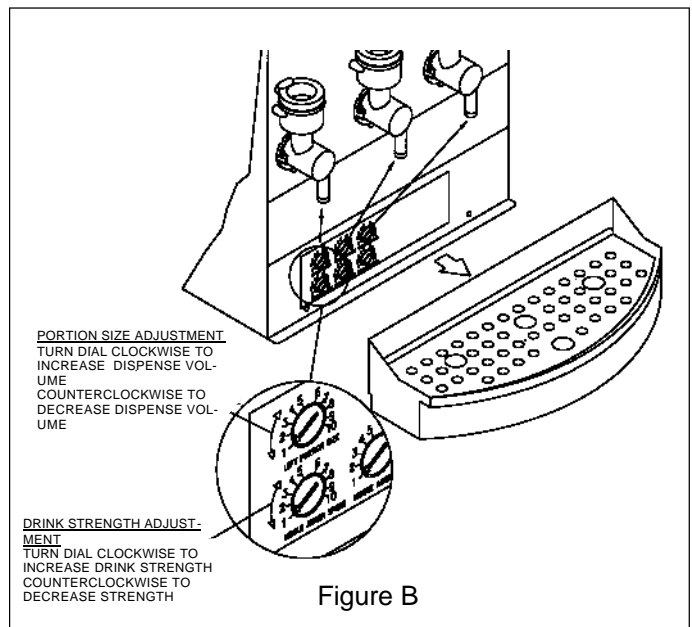


Portion Size & Drink Strength Adjustment for Model PIC-J (Refer to Figure B)

Tool required: #2 Flat Head screwdriver.

1. Dispense a drink to determine if drink is too strong, weak or if portion size is correct.
2. Turn off power to machine at power switch.
3. Drink strength and portion size controls will be found behind the drain tray. (Refer to Figure B) For portion size adjustment, turn dial clockwise to increase dispense volume. To decrease volume turn dial counterclockwise. For drink strength adjustment turn dial clockwise to increase drink strength. To decrease strength turn dial counterclockwise. Turn on power to machine and dispense a drink to determine if drink strength or portion is acceptable. If drink strength or portion is not acceptable, turn off power to machine and repeat adjustment steps until desired drink strength or portion is achieved. Note: clockwise rotation will result in a stronger drink and counterclockwise will result in a weaker drink.

Note: Water flow rate is factory preset at approximately 0.80 ounces per second.



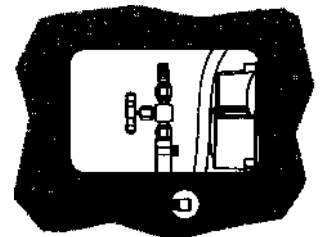
* To adjust flow rate, remove left side upper panel. Use flat head screwdriver and turn knob on respective dump valve. **WARNING:** Do not adjust flow rate above the factory setting to prevent funnel overflow.

Using the Ambient Temperature Option (Refer to Figure C)


(On models equipped with this option)

The Ambient Temperature Option is only available on the left head of the machine. To dispense ambient temperature product from the left head, flip the "hot/cold" switch (behind the unit's door and below the left hopper) in the "cold" position. To dispense hot product from the left head, the "hot/cold" switch should be in the "hot" position.

Note: Water flow rate is factory set at approximately 0.80 oz per second. Do not adjust flow rate above the factory setting to prevent funnel overflow.



Service and Cleaning

-  **Caution:** When cleaning this unit, do not use cleansers, liquid bleach, powders or any other substance that contains chlorine. These products promote corrosion of stainless steel and plastics parts. Use of these products will void the warranty.

Daily Cleaning and Maintenance

1. Empty the drip pan as needed and wash daily in a solution of dish detergent.
2. Rinse out the whipper chambers by placing the rinse switch (located on the right of the dispensing valves when the door is open) in the "ON" position. Dispense one to two cups until the water is clean. Short bursts of dispensing may also help clean the chambers. When completed, return the rinse switch to the "OFF" position.
3. Remove the hoppers and refill with product.

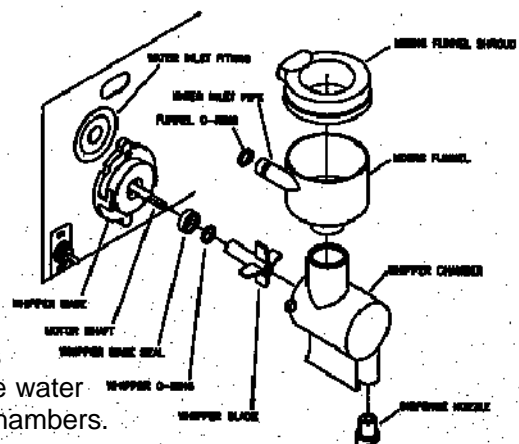


Figure D

Weekly Cleaning

Removing and Cleaning the Chambers (Refer to Figure D)

1. Open the door and remove the mixing funnel shroud by pulling forward while turning 1/4 turn to the right. Lift off and remove.
2. Remove the mixing funnel by lifting the neck of the funnel out of the whipper chamber, then tilt to the left. With one hand on the water inlet fitting on the back panel, pull the funnel out of the white ring.
3. Remove the whipper chamber by rotating it 1/8 of a turn to the right, then pull to remove.
4. Remove the whipper blade by grasping the whipper blade with two fingers and firmly pulling to remove.
5. All parts in contact with food must be washed, rinsed, sanitized and air dried.

To Reassemble

1. Replace the whipper blade by aligning the flat side inside the blade with the flat side of the motor shaft. Push blade firmly onto shaft.
2. Replace the whipper chamber by positioning the medium sized opening up and tilting 1/8 of a turn to the right. Put the whipper chamber over the whipper blade and turn to the left until it locks into place.
3. Replace the mixing funnel by positioning the large opening up and tilting it slightly to the left. Lubricate the o-ring on the water inlet pipe with a film of food grade grease. Insert the water inlet pipe into the water inlet fitting on the back panel, then rotate the funnel to the right until the neck of the funnel seats inside the whipper chamber opening.
4. Replace the shroud by placing it on the mixing funnel with the opening to the right. Turn the shroud to the left until the opening in the shroud rests inside the opening in the back panel.

Note: Whipper seals should be replaced every (6) months to prevent wear.

Disassembling & Cleaning the Hoppers



CAUTION! Do not wash hopper without first disassembling.

1. Open the door and rotate the dispense elbow on the hopper to the "UP" position to prevent spillage. (Figure E)
2. Remove the hopper from the cabinet.
3. Remove the hopper cover and empty hopper contents.
4. Pull off the elbow.
5. Remove the auger pinwheel by pulling it forward while stretching out the sides of the hopper. (Figure F)
6. Remove the driveline and washer at the rear of the hopper by holding the auger spring with one hand at the front of the hopper while turning the driveline clockwise with the other hand. (Figure G)
7. Remove the auger spring and auger spring driveshaft by pulling them out through the lower front opening of the hopper. (Figure H)
8. Remove the palnut at the rear of the hopper by turning it counterclockwise, then remove the driveshaft bearing from the inside of the hopper.
9. All parts in contact with food must be washed, rinsed, sanitized, and air dried.

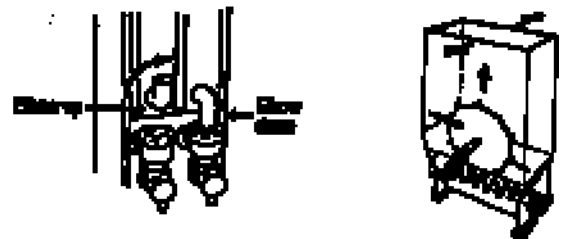
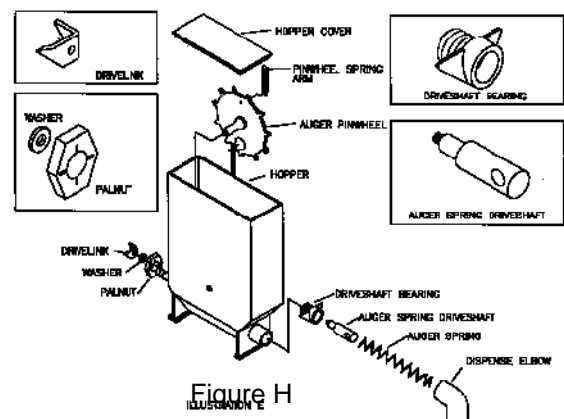


Figure E

Figure F



Figure G



Service and Cleaning (con't.)

Cleaning the Steam Plenum Tray: (Refer to Figure K)

1. Remove hoppers from machine.
2. Remove cover plate.
3. Using a damp towel, wipe powder build-up from inside steam plenum tray.



Caution: Do not pour liquid into tray. Failure to comply will damage the dispenser and void the warranty.

4. Replace cover plate.
5. Replace hoppers.

Reassembling the Hoppers

IMPORTANT: All components must be completely dry prior to reassembly

1. Place the driveshaft bearing inside the hopper with the threads going through the hole in the rear of the hopper.
2. Secure the bearing by attaching the palnut to the bearing at the outside rear hopper opening finger tight only. Use one hand inside the hopper to push the bearing outward while turning the palnut clockwise.
3. Install the auger spring driveshaft and the auger spring by inserting the flat end of the spring into the hole in the auger driveshaft.
4. Insert assembly into the lower front hopper opening, making sure the threaded end of the auger spring drive shaft completely inserts into the driveshaft bearing in the rear of the hopper. The driveshaft bearing threads should be accessible from the outside rear of the hopper.
5. Place the washer over the driveshaft bearing threads followed by securing the driveline onto the driveshaft bearing by turning counterclockwise. Secure the auger spring with one hand while attaching the driveline with the other.
6. Replace the auger pinwheel making sure the pins are securely positioned inside the locator holes in the hopper.
7. Replace the dispense elbow in the "UP" position.
8. Fill the hopper with product and replace the cover.
9. Reinstall the hopper into the machine, making sure it is properly positioned inside the notches under the hopper.
10. Turn the elbow down toward the mixing funnel, keeping it lined up over the funnel opening.

To prepare for shipment: Important-Always completely empty water tank and powder hoppers prior to shipping unit. (See draining the tank and cleaning the hoppers sections)

Draining the Tank

Always empty the tank before shipping. Warning: Draining of tank should be performed by a qualified service technician. The tank contains 3 1/2 gallons of very hot water. May cause severe burns.

1. Prepare a 5 gallon heat resistant container to drain the tank water into.
2. Unplug the machine.
3. Remove the drain tray and front access panel.
4. Locate the silicone drain hose on the left side wall. Put the end of the drain hose into the bucket. Secure the end of the drain hose (i.e. with tape) into the bucket.
5. Remove the hose clamp and plug.
6. Allow the tank to drain completely.
Warning: Do not attempt to stop the flow of water once it begins to drain.
7. Once the tank is empty, securely replace the plug and clamp on the end of the hose. Reposition the drain hose inside the hose clip on the left side wall.
8. Reassemble the front access panel and drain tray.

Purging machine of all water for shipment in cold areas

Warning: This procedure should be performed by a qualified service technician.

The unit can be purged of water as follows:

1. Turn the power switch to the "OFF" position.
2. Drain the water tank (refer to instructions above). Do not replace the drain hose plug and clamp until further instructed.
3. Turn the power switch to the "ON" position. The ready light should turn itself "ON" within 12 seconds. The 12 second delay signals that the heating element has been disabled due to the lack of water in the tank after it is drained. Important: If the ready light does not turn itself "ON" within 12 seconds, turn the power "OFF" to avoid burning out the heating element.
4. Listen for the inlet valve to energize. To purge the inlet valve and water inlet tube, apply 10-20 psi compressed air to the inlet valve connection for 10 to 20 seconds while the inlet valve is energized. Note: Do not energize the inlet valve for more than 5 minutes at a time. Otherwise, the watchdog timer will disable the inlet valve. If this occurs, reset the machine by flipping the power switch "OFF" then "ON".
5. After the inlet valve and water inlet tube are purged, purge the dump valves and dispense lines. While applying 10-20 psi compressed air to the inlet valve connection, press and hold each dispense button for 1-2 seconds.
6. Turn the power switch to the "OFF" position. Replace the drain hose plug and clamp. Reposition the drain hose inside the hose clip on the left side wall.
7. Reassemble the front access panel and drain tray.

Cleaning the steam recovery tray (Recommended once every 3 months)

Warning: Risk of electric shock; Disconnect from power before servicing!

1. Remove the side access panel (Refer to figure J)
2. Disconnect the flexible vent tube attached to the recovery tray.
3. Remove the two screws which fasten the recovery tray to the sheetmetal enclosure and remove the recovery tray through the side access hole.
4. Remove the back access plate (refer to figure K). Disconnect and remove the flexible vent tube from the blower housing. Carefully remove the flexible vent tube from the machine's cabinet.
5. Wash, rinse, sanitize, and air dry the recovery tray and hose. Note: A long soft bristle brush or small cloth towel may be used to clean the internal passage of the flexible vent tube by pushing it through the tube. Rinse, sanitize and air dry the tube.
6. Reassemble the parts in reverse order.

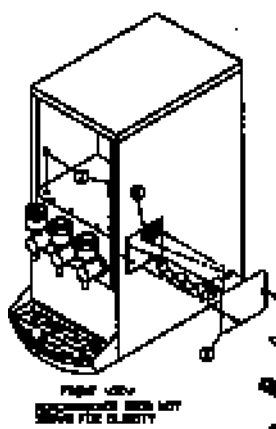


Figure I

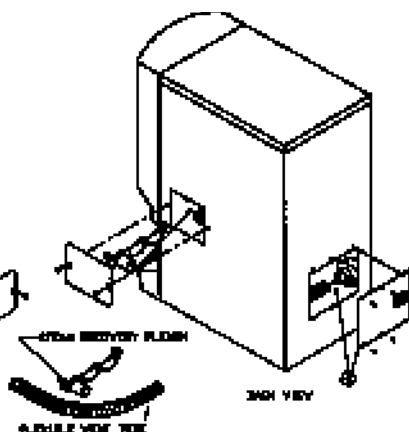


Figure J

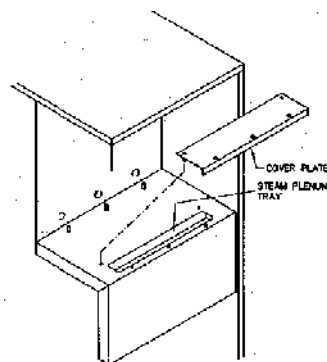


Figure K

Changing the Lightbulb on Models With a Backlit Merchandiser (Refer to Figure L)

(Refer to serial tag to verify model number of your machine)

Warning: Disconnect machine from branch electrical supply before changing the lightbulb.

Note: The machine uses a F8T5 12" 8 watt replacement bulb.

1. Remove the front merchandiser photo and cover by grasping the edges of the merchandiser.
2. Remove the old lightbulb by gently turning the lightbulb 1/4 turn to the left and pulling the bulb from the socket.
3. Install the new bulb by lining up the pins on either end of the bulb parallel with the socket opening.
4. Gently insert both ends of the bulb into the socket and turn the bulb 1/4 turn to the right until the bulb locks into place.
5. Replace the merchandiser photo and cover.

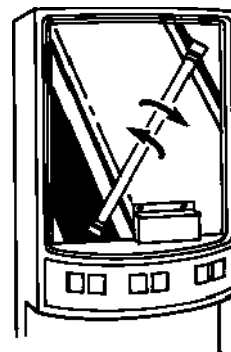


Figure L

Changing the Lightbulb on Stainless Steel Models with a Backlit Merchandiser

(Refer to figures M and N)

(Refer to serial tag to verify model number of your machine)

Warning: Disconnect machine from branch electrical supply before changing the lightbulb

Note: The machine uses a F8T5 12" 8 watt replacement bulb.

1. Open the merchandiser door.
2. Remove the 2 screws at each end of the lightbulb panel inside the door.
3. The panel will come down to allow the bulb to be changed.
4. Remove the old lightbulb by gently turning the lightbulb 1/4 turn to the left and pulling the bulb from the socket.
5. Install the new bulb by lining the pins on either end of the bulb parallel with the socket opening.
6. Gently insert both ends of the bulb into the socket and turn the bulb 1/4 turn to the right until the bulb locks into place.
7. Replace the lightbulb panel. Reinstall the screws.

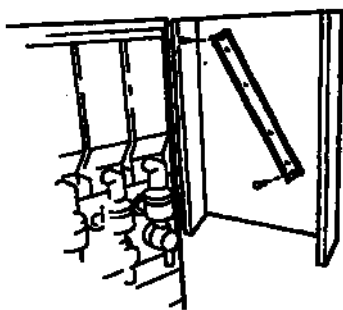


Figure M

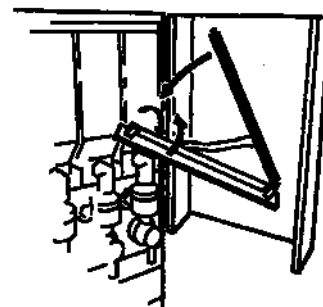
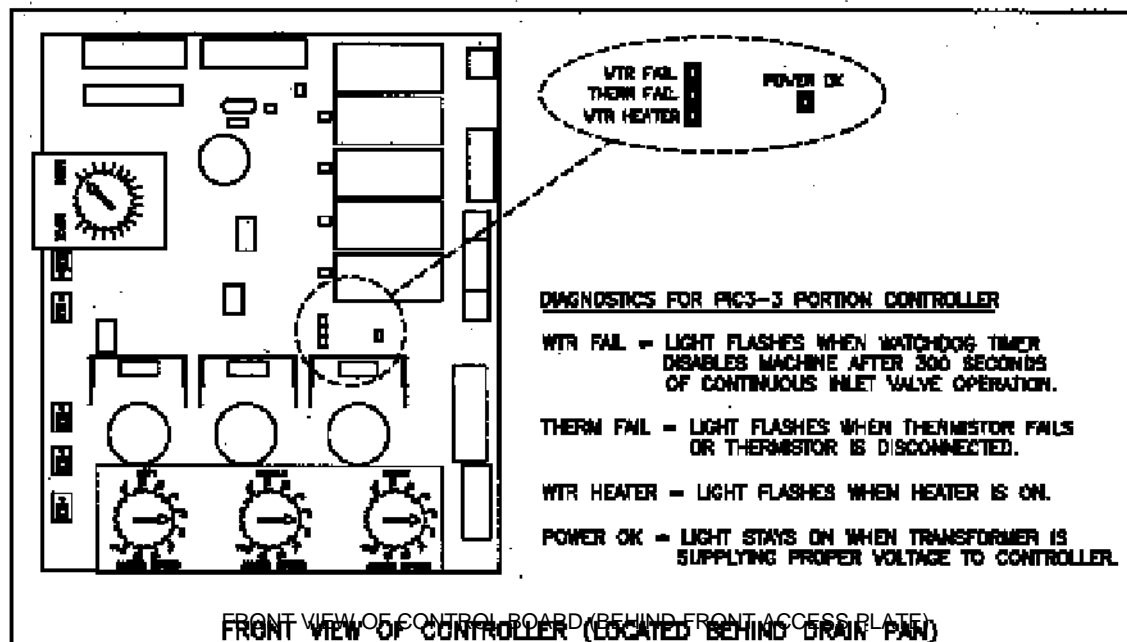


Figure N

TROUBLESHOOTING GUIDE

Only a qualified service technician should perform Electrical and mechanical adjustments or repairs. Always disconnect power before attempting any maintenance procedures.



If WTR FAIL light is flashing:

Ensure water supply to machine is turned "on".
Reset machine power "off" then "on".

If THERM FAIL light is flashing:

Reset machine power "Off" then "On". If green ready light does not turn off after 10 seconds then:
Check thermistor connections.
If connected properly, replace faulty thermistor.
(Mineral build-up may be the cause.)

WTR HEATER light will flash on and off when the water tank is being heated:

Note: When green "ready" light on front of machine is "Off" WATER HEATER light should flash. If light works properly and machine is not heating, replace faulty heater.
(Mineral build-up may be the cause.)

If POWER OK light is off:

Make sure power switch is on and machine is plugged in.
If switch is on, and light is off, call factory for assistance.

If you still need help, call our service department at (800) 568-5715 Ext. 3 (Monday through Friday, 8 am - 6 pm EST) or an authorized service center in your area. Please have the model and serial numbers ready so that accurate information may be given.

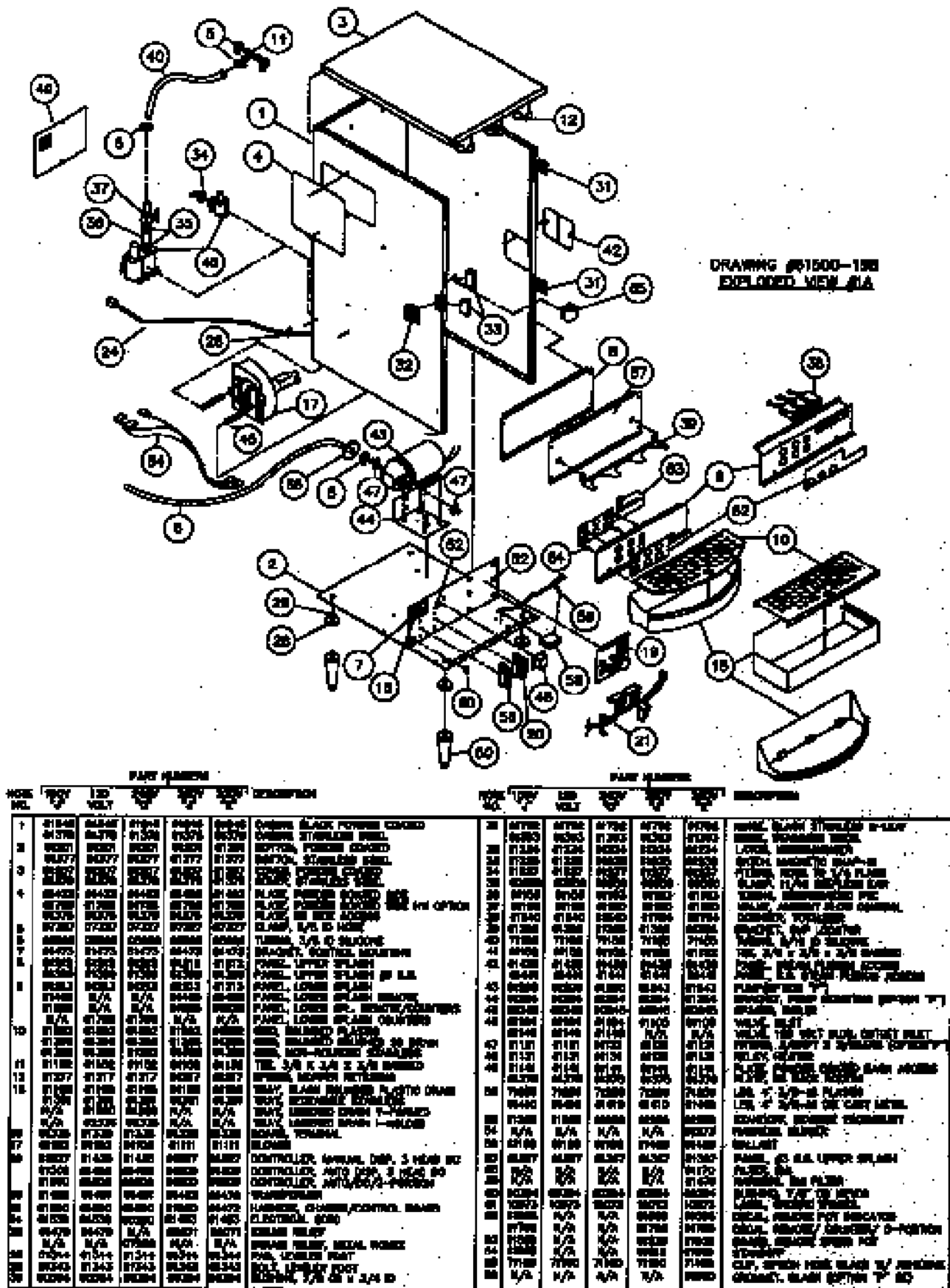
Prior authorization must be obtained from Grindmaster Crathco Systems, Inc. Technical Services Department for all warran-

TROUBLESHOOTING GUIDE (CONT.)

Only a qualified service technician should perform Electrical and mechanical adjustments or repairs. Always dis-

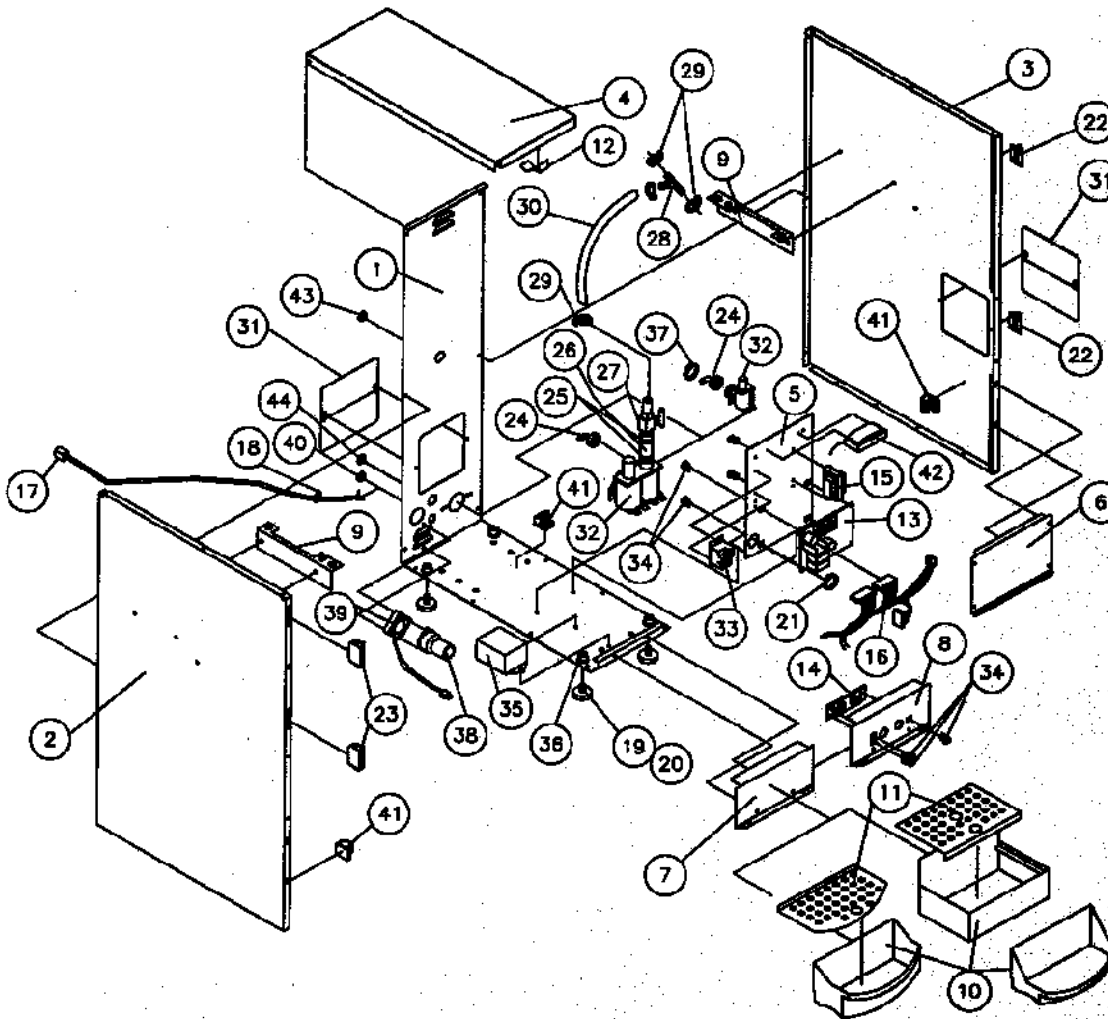
PROBLEM	PROBABLE CAUSE	CORRECTIVE ACTION
No powder dispensed into mixing funnel	Rinse switch turned to "RINSE ON" position	Flip rinse switch to "RINSE OFF" position
	Powder hopper dispense outlet clogged	Refer to Cleaning of Hoppers section
	No or low powder level in hopper	Refill hopper
	Hopper driveline not engaged with motor	Remove and reinstall hopper and ensure engagement with motor
	Hopper elbow is not directed into the mixing funnel	Turn down dispense elbow; line it up with mixing funnel
Machine will not dispense any product (water or powder)	Power turned "OFF" to machine	Ensure power switch is in "ON" position, machine is plugged in and water is turned on
	Dispense cycle watchdog timer has tripped	Reset machine by flipping power switch "OFF" then "ON" once (the maximum run time per head is limited to 40 seconds before the watchdog timer disables the dispense heads)
	Faulty transformer	Contact factory for assistance
	Faulty control board	Contact factory for assistance
Product not whipping	Whipper blade broken or missing	Verify blade is in place. Replace if broken or missing
Water overflows mixing funnel	Water flow too fast	Contact factory for assistance Dump valves to be adjusted.
	Whipper chamber outlet restricted	Remove obstruction
	Whipper blade broken or missing	Verify blade is in place. Replace if broken or missing
Drink is too weak or strong		Refer to Drink Strength Adjustment section page 6
Drink is too hot or cold		Refer to Thermostat Adjustment section page 5
No hot water from dispense head	Check for flashing lights on controller	Refer to controller Diagnostics section pg 12
	Water level in tank is below water probe	Ensure that water supply to machine is "ON" and reset power to machine
	Thermostat not adjusted	See Thermostat Adjustment section page 5
	Faulty heater relay	Replace heater relay
	Dump tube from water tank is kinked	Check tubing for obstructions
	Water shorting out probe connections	Dry connections on tank
Water tank boils water	Check for flashing lights on controller	Refer to controller Diagnostics section
	Thermostat adjustment set too high	See Thermostat Adjustment section
	Faulty heater relay	Replace heater relay
No water dispensed from dispense nozzle	Water supply to machine turned "off"	Turn "ON" water supply to machine
	Check for flashing lights on controller	Refer to controller Diagnostics section
	Faulty dump valve	Replace dump valve
Water overflows from water tank	Leaky inlet water valve	Replace inlet water valve
	Faulty level probe connection	Check level probe connections
	Faulty level probe due to mineral build-up	Replace probe
	Inlet water pressure too high (greater than 120 psi)	Install pressure regulator to water inlet
Machine inadvertently dispenses from dispense heads	Wet wiring connections on harness or controller	Allow connections to dry
Drink is cold and ready light is on	Check for flashing lights on controller	Refer to controller Diagnostics section page 12

Exploded Views PIC-2-DC, PIC-3-DC, PSD-2, and PSD-3



Exploded Views PIC-1-DC and PSD-1

DRAWING #91500
EXPLODED VIEW #1

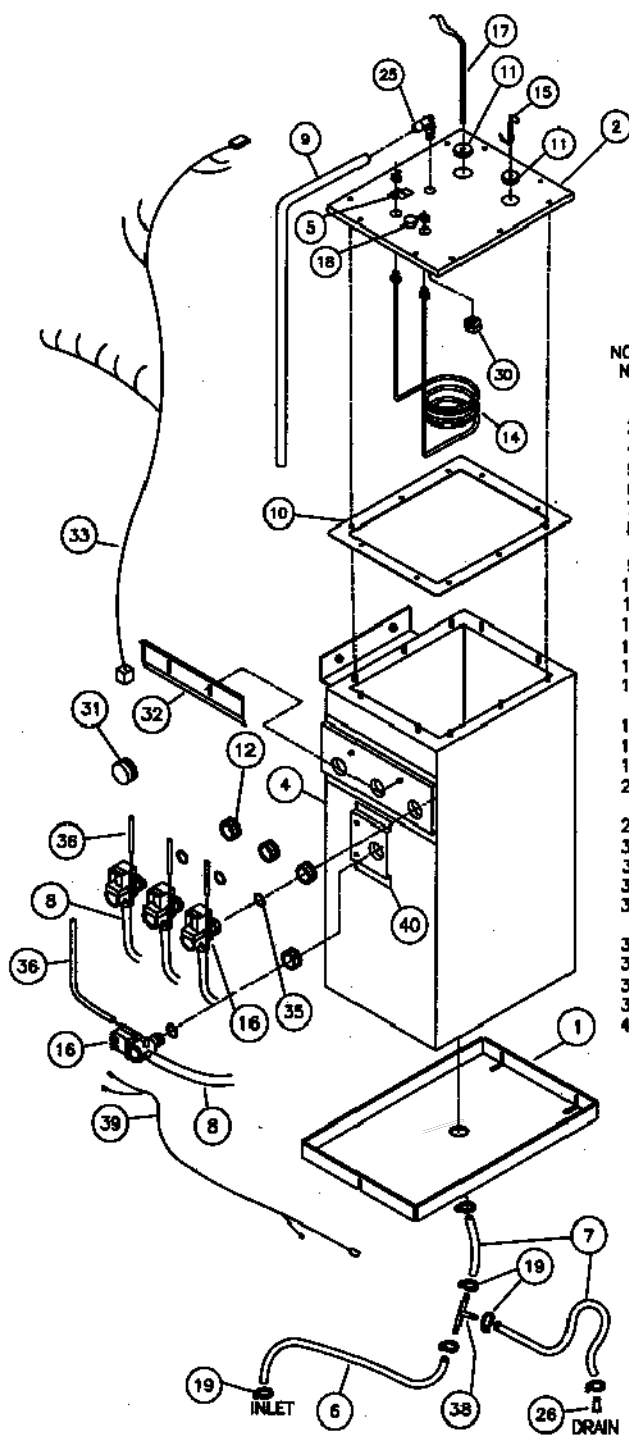


PART NUMBERS						DESCRIPTION
NOTE NO.	120 VOLT	230V "E"	100V "F"	240V "G"	200V "J"	
1	61601	61601	61601	61601	61601	BOTTOM/BACK, POWDER COATED
2	61648	61648	61648	61648	61648	BOTTOM/BACK, STAINLESS STEEL
3	60326	60326	60326	60326	60326	PANEL, LEFT SIDE, POWDER COATED
4	60327	60327	60327	60327	60327	PANEL, RIGHT SIDE, POWDER COATED
5	61607	61607	61607	61607	61607	COVER, TOP, POWDER COATED
6	61647	61647	61647	61647	61647	COVER, TOP, STAINLESS STEEL
7	61610	61610	61610	61610	61610	BRACKET, CONTROL MOUNTING
8	61604	61604	61604	61604	61604	PANEL, UPPER SPLASH
9	61613	N/A	N/A	61613	N/A	PANEL, LWR. SPLASH, STANDARD
10	N/A	61704	61704	N/A	61704	PANEL, LWR. SPLASH, REMOTE
11	61602	61602	61602	61602	61602	BRACKET, TANK MOUNTING
12	61706	61706	61706	61706	61706	TRAY, DRAIN, PLASTIC
13	62335	62335	62335	62335	62335	TRAY, DRAIN PLASTIC LOW
14	61726	61726	61726	61726	61726	TRAY, DRAIN, SS
15	61617	61617	61617	61617	61617	GRID, DRAIN, PLASTIC
16	61727	61727	61727	61727	61727	GRID, DRAIN, SS
17	61217	61217	61217	61217	61217	SPRING, HOPPER RETAINING
18	61632	(61632)	(61632)	61632	(61632)	CONTROLLER, PIC1 (MANUAL/OPT. OVERSEAS)
19	N/A	61737	61737	N/A	61737	CONTROLLER, PIC1 (AUTO/ANALOG)
20	(61739)	N/A	N/A	(61739)	N/A	CONTROLLER, PIC1 (AUTO/DIGITAL OPT.)
21	N/A	61643	61643	N/A	61643	CTRL. BOARD, REMOTE (ANALOG OPT.)
22	61481	61470	61482	61481	61482	TRANSFORMER, CONTROL BOARD
23	61708	61712	61708	61708	61708	HARNES, CONTROL BOARD
24	61530	61453	62860	60200	61736	POWER CORD
25	61479	68071	68071	N/A	68071	STRAIN RELIEF, HEYCO
26	N/A	N/A	N/A	07920	N/A	STRAIN RELIEF, METAL ROMEX
27	61344	61344	61344	61344	61344	PAID, LEVELLER FOOT
28	61343	61343	61343	61343	61343	BOLT, LEVELLER FOOT

PART NUMBERS						DESCRIPTION
NOTE NO.	120 VOLT	230V "E"	100V "F"	240V "G"	200V "J"	
21	60394	60394	60394	60394	60394	BUSHING, 7/8 O.D. x 3/4 I.D.
22	61400	61400	61400	61400	61400	HINGE, BLACK STAINLESS 4-LEAF
23	61792	61792	61792	61792	61792	HINGE, BLACK STAINLESS 2-LEAF
24	61363	61363	61363	61363	61363	HINGE, STAINLESS STEEL
25	61235	61235	61235	61235	61235	CATCH, MAGNETIC SNAP-IN
26	61237	61237	61237	61237	61237	FITTING, HOSE TO 1/4 FLARE
27	60550	N/A	N/A	60550	N/A	CLAMP, 11/16 STEELLESS EAR (*)
28	61153	N/A	N/A	61153	N/A	TUBING, INNER BRAIDED, PVC (*)
29	61150	N/A	N/A	61150	N/A	VALVE, AMBIENT FLOW CTRL. (*)
30	61152	N/A	N/A	61152	N/A	TEE, 7/16 x 7/16 x 7/16 (*)
31	07327	N/A	N/A	07327	N/A	CLAMP, 5/8 I.D. HOSE (*)
32	71155	N/A	N/A	71155	N/A	TUBING, 5/16 I.D. SILICONE (*)
33	61438	61438	61438	61438	61438	PANEL, PLENUM ACCESS, SS
34	61441	61441	61441	61441	61441	PANEL, PLENUM ACCESS, SS
35	61104	61105	61104	61104	61105	VALVE, INLET
36	61148	N/A	N/A	61148	N/A	VALVE, INLET W/DUAL OUT. (*)
37	61131	61131	61131	61131	61131	RELAY, HEATER
38	61266	61266	61266	61266	61266	STANDOFF, PCB MOUNT
39	N/A	61170	N/A	N/A	N/A	FILTER, EM, 230V
40	60380	60380	60380	60380	60380	RIVNUT, 3/8-16
41	N/A	61514	N/A	N/A	N/A	O-RING, 0.906 I.D. x .210
42	61633	61633	61633	61633	61633	PLENUM/FAN MOUNT
43	61635	61635	61635	61635	61635	FAN, 24VDC, 40mm
44	71138	N/A	N/A	71138	N/A	PLUG, STR. RELIEF, 5/8"
45	71180	71180	71180	71180	71180	CLIP, HOSE W/ADHESIVE
46	61196	61468	61196	61196	61196	BALLAST (LIT MERCURY OPTION)
47	61743	61743	61743	61743	61743	PLUG, HOLE, 3/4" HEYCO
48	N/A	61751	61751	61751	61751	PLUG, STR. RELIEF, 3/4"

(*) = USED W. AMBIENT TEMP. OPTION

Water Tank Assembly PIC-2-DC, PIC-3-DC, PSD-2, and PSD-3



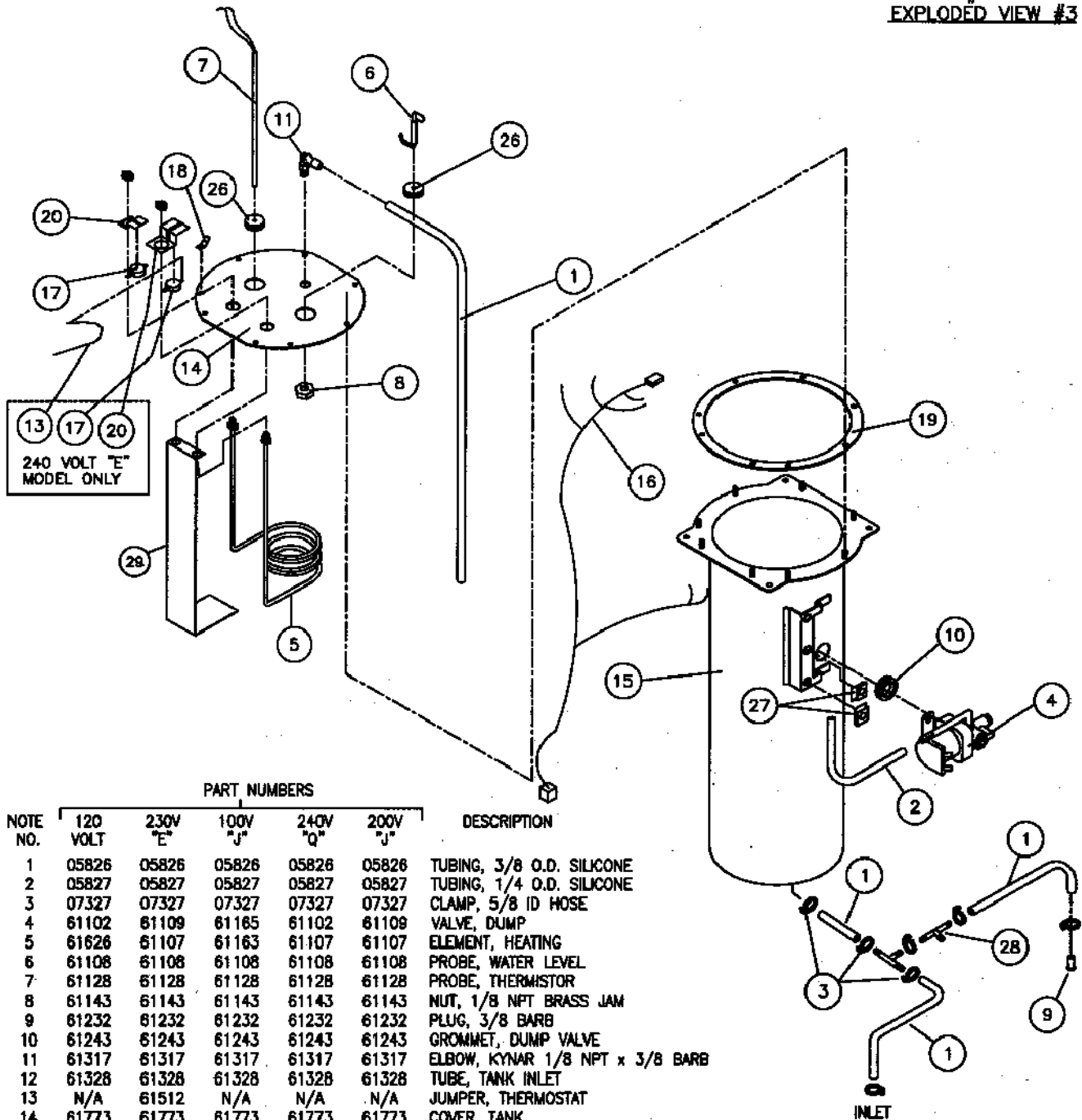
DRAWING #61500-3AA

EXPLODED VIEW #3

NOTE NO.	PART NUMBERS					DESCRIPTION
	100V "J"	120 VOLT	240V "Q"	200V "J"	230V "E"	
1	61845	61845	61845	61845	61845	BRACKET, TANK RETAINING
2	61842	61842	61842	61842	61842	COVER, TANK
4	61841	61841	61841	61841	61841	TANK, 3.5 GALLON WELDED
5	70824	70824	70824	70824	70824	BRACKET, HI-TEMP THERMOSTAT
6	05826	05826	05826	05826	05826	TUBING, INLET VALVE
7	05826	05826	05826	05826	05826	TUBING, TANK DRAIN
8	71155	71155	71155	71155	71155	TUBING, DUMP VALVE (PIC)
	05826	05826	05826	05826	05826	TUBING, DUMP VALVE (LCD)
9	05826	05826	05826	05826	05826	TUBING, VENT
10	61844	61844	61844	61844	61844	GASKET, 3.5 GALLON TANK
11	71147	71147	71147	71147	71147	GROMMET, PROBE
12	61243	61243	61243	61243	61243	GROMMET, DUMP VALVE
14	61826	61826	61107	61107	61107	ELEMENT, HEATING
15	61108	61108	61108	61108	61108	PROBE, WATER LEVEL
16	61165	61102	61102	61109	61109	VALVE, DUMP
		61810	61810			VALVE, HI-FLOW DUMP (LCD)
17	61128	61128	61128	61128	61128	PROBE, THERMISTOR
18	70410	70410	70410	70410	70410	THERMOSTAT, HI-LIMIT
19	07327	07327	07327	07327	07327	CLAMP, 5/8 ID HOSE
25	61317	61317	61317	61317	61317	ELBOW, KYNAR 1/8NPTx3/8BARB
	61417	61417	61417	61417	61417	ELBOW, BRASS 1/8NPTx3/8BARB
26	61232	61232	61232	61232	61232	PLUG, 3/8 BARB
30	61143	61143	61143	61143	61143	NUT, 1/8 NPT BRASS JAM
31	61229	61229	61229	61229	61229	GROMMET, PLUG
32	61137	61137	61137	61137	61137	CLIP, VALVE RETAINING
33	61890	61890	61890	61890	61268	HARNESS, TANK PIC, PSD
	61268	61268	61268	61268	61268	HARNESS, TANK LCD
35	61365	61365	61365	61365	61365	O-RING, DUMP VALVE
36	05872	05872	05872	05872	05872	TUBING, 1/4" SILICONE
38	61152	61152	61152	61152	61152	TEE, 7/16" BARBED
39	61764	61764	61764	61764	61764	HARNESS, HW SPOUT OPTION
40	61755	61755	61755	61755	61755	BRACKET, HW SPOUT OPTION

Water Tank Assembly PIC-1-DC and PSD-1

DRAWING #61600-3C
EXPLODED VIEW #3

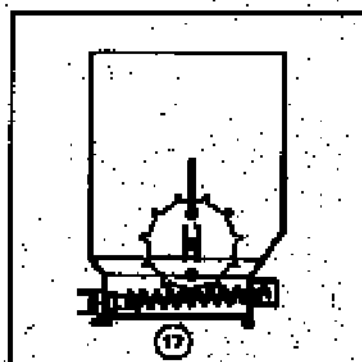


NOTE NO.	PART NUMBERS					DESCRIPTION
	120 VOLT	230V "E"	100V "J"	240V "Q"	200V "U"	
1	05826	05826	05826	05826	05826	TUBING, 3/8 O.D. SILICONE
2	05827	05827	05827	05827	05827	TUBING, 1/4 O.D. SILICONE
3	07327	07327	07327	07327	07327	CLAMP, 5/8 ID HOSE
4	61102	61109	61165	61102	61109	VALVE, DUMP
5	61626	61107	61163	61107	61107	ELEMENT, HEATING
6	61108	61108	61108	61108	61108	PROBE, WATER LEVEL
7	61128	61128	61128	61128	61128	PROBE, THERMISTOR
8	61143	61143	61143	61143	61143	NUT, 1/8 NPT BRASS JAM
9	61232	61232	61232	61232	61232	PLUG, 3/8 BARB
10	61243	61243	61243	61243	61243	GROMMET, DUMP VALVE
11	61317	61317	61317	61317	61317	ELBOW, KYNAR 1/8 NPT x 3/8 BARB
12	61328	61328	61328	61328	61328	TUBE, TANK INLET
13	N/A	61512	N/A	N/A	N/A	JUMPER, THERMOSTAT
14	61773	61773	61773	61773	61773	COVER, TANK
15	61700	61700	61700	61700	61700	TANK, 1.5 GALLON HOT WATER
16	61710	61710	61710	61710	61710	HARNES, TANK
17	70410	70410	70410	70410	70410	THERMOSTAT, HI-LIMIT
18	70635	70635	70635	70635	70635	TERMINAL, GROUND TAB
19	70821	70821	70821	70821	70821	GASKET, 1.5 GALLON TANK
20	70824	70824	70824	70824	70824	BRACKET, HI-TEMP THERMOSTAT
21	71070	71070	71070	71070	71070	FITTING, 9/16-24 x 1/8 FPT
22	71071	71071	71071	71071	71071	NUT, JAM
23	71076	71076	71076	71076	71076	WASHER, 9/16 ID BRASS
24	71097	71097	71097	71097	71097	NUT, 3/8 COMPRESSION
25	71098	71098	71098	71098	71098	SLEEVE, 3/8 COMPRESSION
26	71147	71147	71147	71147	71147	GROMMET, PROBE
27	71166	71166	71166	71166	71166	NUT, TINNEMAN
28	61152	61152	61152	61152	61152	TEE, 7/16" BARBED
29	61868	61868	61868	61868	61868	BRACKET, BAFFLE FOR TANK

Hopper Assembly PIC-2-DC, PIC-3-DC, PSD-2, and PSD-3



DRAWING #51500-2X
EXPLODED VIEW #2A



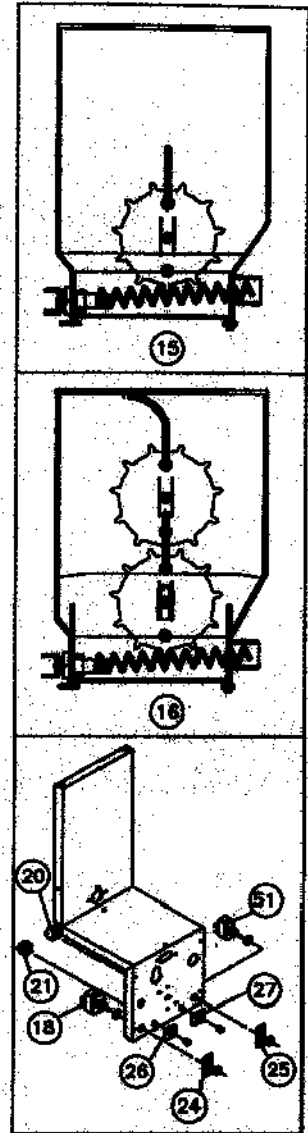
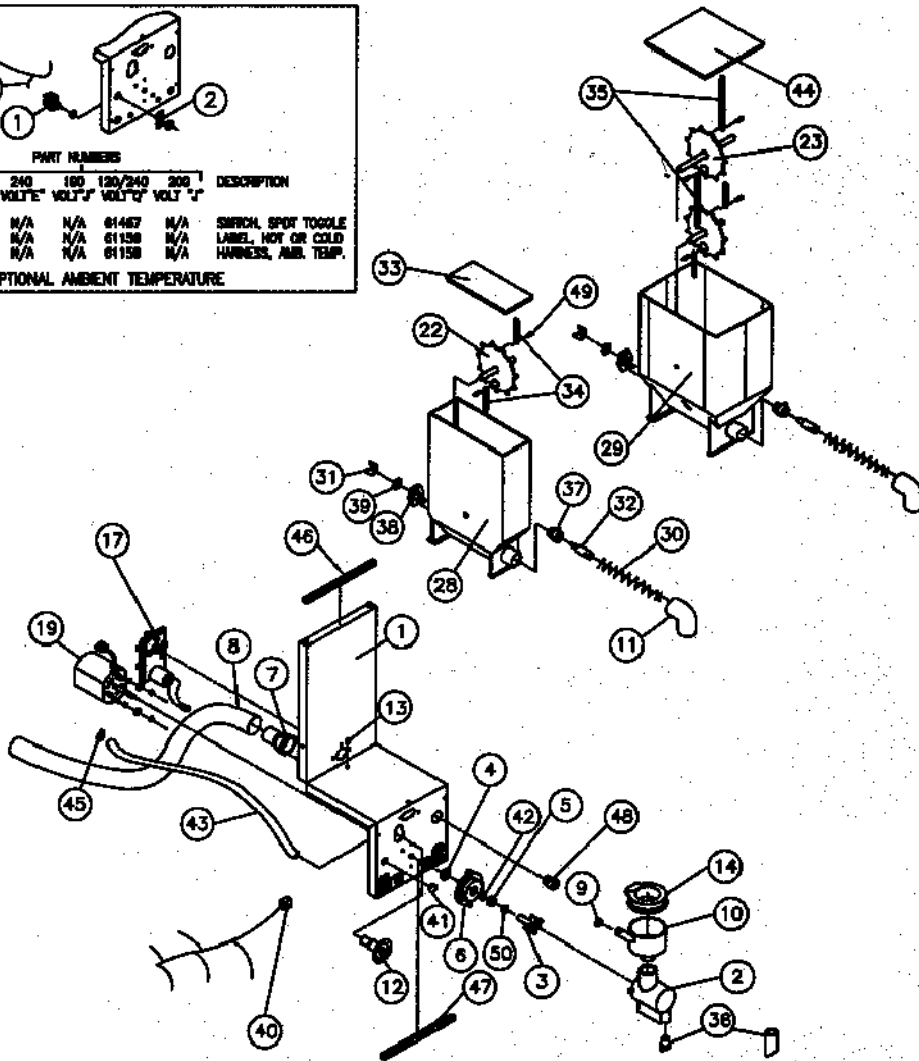
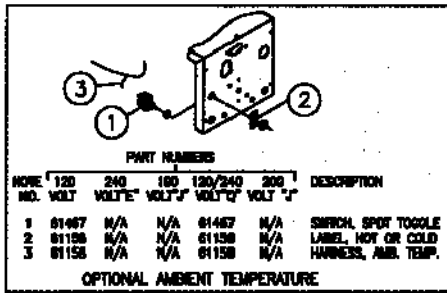
NOTE NO.	100V VOLT	120V VOLT	125V VOLT	200V VOLT	250V VOLT	DESCRIPTION
1	01800	01800	01800	01800	01800	BRACKET, HOPPER MOUNTING
2	01783	01783	01783	01783	01783	BRACKET, HOPPER CLEAN-OUT
3	01244	01244	01244	01244	01244	SPROUT, HOT WATER OPTION
4	02306	02306	02306	02306	02306	PLATE, DISPENSE HEAD FROM
5	01438	01438	01438	01438	01438	CHAMBER, WHIPPER
6	01334	01334	01334	01334	01334	BLADE, WHIPPER FOUR
7	01523	01523	01523	01523	01523	WHIPPER, WHIPPER
8	01187	01187	01187	01187	01187	ARM, WHIPPER BASE/NEAL/BRAG
9	01187	01187	01187	01187	01187	PLATE, STRAIN RECOVERY
10	01123	01123	01123	01123	01123	TUBING, 1 1/4" O.D. FLEXIBLE
11	01127	01127	01127	01127	01127	O-RING, 3/8" ID x 1/8" OD
12	01221	01221	01221	01221	01221	FUNNEL
13	01223	01223	01223	01223	01223	ELBOW, HOPPER
14	01228	01228	01228	01228	01228	FITTING, FUNNEL, CLIP CONNECT
15	01481	01481	01481	01481	01481	BUTTON, RESTRICTOR ANGLE
16	01800	01800	01800	01800	01800	BUTTON, RESTRICTOR SOUP
17	01250	01250	01250	01250	01250	SHROUD, STRAIN RECOVERY
18	01372	01372	01372	01372	01372	HOPPER, ASSEMBLY OF G.L.
19	01810	01810	01810	01810	01810	WATER, DC ALUMINUM
20	01847	01847	01847	01847	01847	SWITCH, TAP
21	01118	01118	01118	01118	01118	WATER, WHIPPER
22	01188	01188	01188	01188	01188	LAMP, GREEN
23	01187	01187	01187	01187	01187	LAMP, RED

NOTE NO.	100V VOLT	120V VOLT	125V VOLT	200V VOLT	250V VOLT	DESCRIPTION
24	01316	01316	01316	01316	01316	ARMOR, CBL. PENDING
25	01343	01343	01343	01343	01343	DECAL, POWER ON/OFF
26	01347	01347	01347	01347	01347	DECAL, POWER ON/OFF
27	01348	01348	01348	01348	01348	DECAL, POWER ON
28	01348	01348	01348	01348	01348	DECAL, POWER ON
29	01348	01348	01348	01348	01348	DECAL, POWER ON
30	01348	01348	01348	01348	01348	DECAL, POWER ON
31	01348	01348	01348	01348	01348	DECAL, POWER ON
32	01348	01348	01348	01348	01348	DECAL, POWER ON
33	01348	01348	01348	01348	01348	DECAL, POWER ON
34	01348	01348	01348	01348	01348	DECAL, POWER ON
35	01348	01348	01348	01348	01348	DECAL, POWER ON
36	01348	01348	01348	01348	01348	DECAL, POWER ON
37	01348	01348	01348	01348	01348	DECAL, POWER ON
38	01348	01348	01348	01348	01348	DECAL, POWER ON
39	01348	01348	01348	01348	01348	DECAL, POWER ON
40	01348	01348	01348	01348	01348	DECAL, POWER ON
41	01348	01348	01348	01348	01348	DECAL, POWER ON
42	01348	01348	01348	01348	01348	DECAL, POWER ON
43	01348	01348	01348	01348	01348	DECAL, POWER ON
44	01348	01348	01348	01348	01348	DECAL, POWER ON
45	01348	01348	01348	01348	01348	DECAL, POWER ON
46	01348	01348	01348	01348	01348	DECAL, POWER ON
47	01348	01348	01348	01348	01348	DECAL, POWER ON
48	01348	01348	01348	01348	01348	DECAL, POWER ON
49	01348	01348	01348	01348	01348	DECAL, POWER ON
50	01348	01348	01348	01348	01348	DECAL, POWER ON
51	01348	01348	01348	01348	01348	DECAL, POWER ON
52	01348	01348	01348	01348	01348	DECAL, POWER ON

Hopper Assembly PIC-1-DC and PSD-1

DRAWING #61600-2D

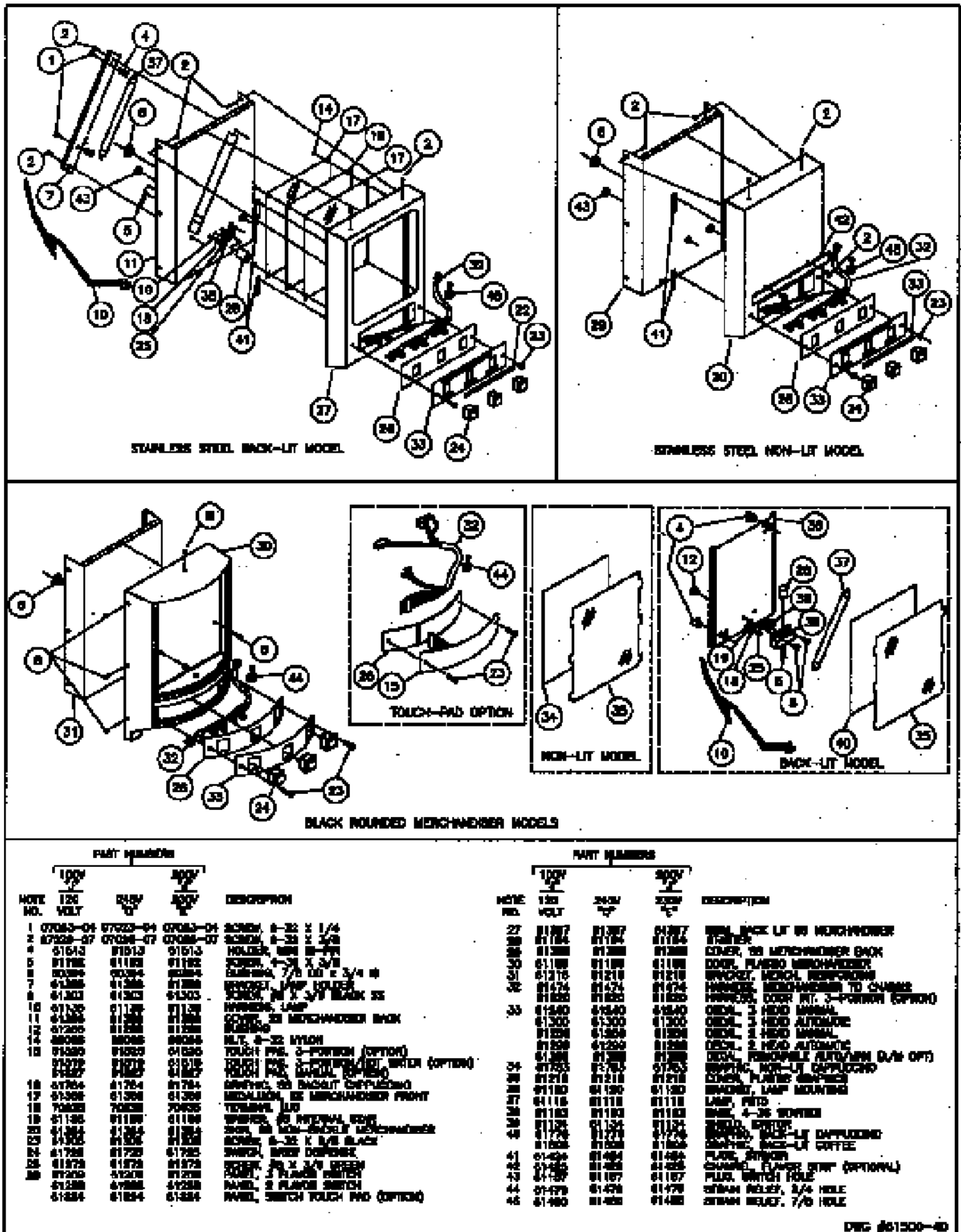
EXPLODED VIEW #2



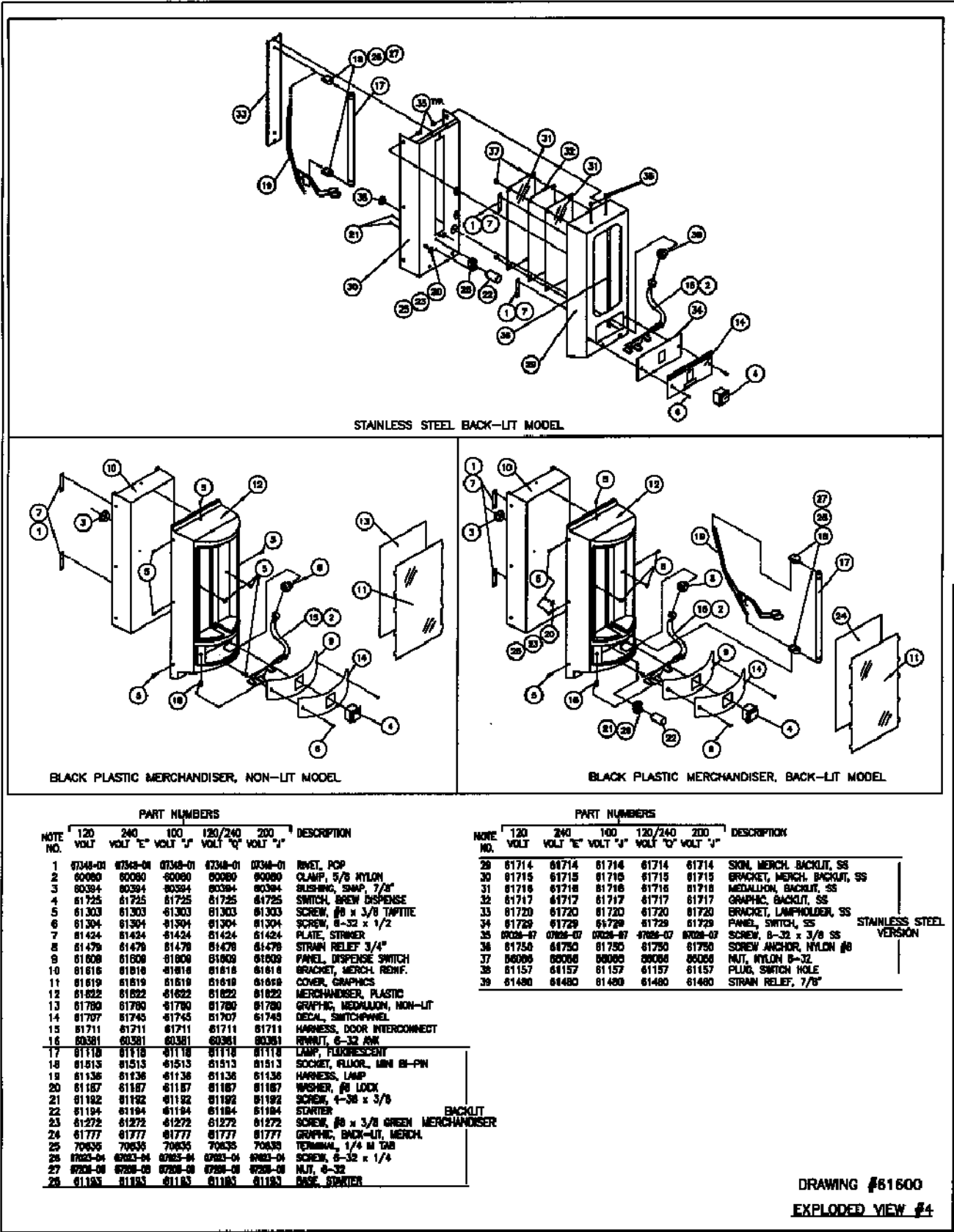
PART NUMBERS						DESCRIPTION
NOTE NO.	120 VOLT	230V "E"	100V "J"	120/240V "Q"	200V "J"	
1	61603	61603	61603	61603	61603	BRACKET, HOPPER MOUNT.
2	62385	62385	62385	62385	62385	CHAMBER, WHIPPER
3	61458	61458	61458	61458	61458	BLADE, WHIPPER FOUR
4	61334	61334	61334	61334	61334	WASHER, SLINGER
5	61459	61459	61459	61459	61459	SEAL, LP, 1/4 ID x 0.618 OD
6	61456	61456	61456	61456	61456	BASE, WHIPPER, SELF-LOCATING
7	61633	61633	61633	61633	61633	PLENUM, STEAM RECOVERY
8	61123	61123	61123	61123	61123	TUBING, 1 1/4" ID FLEXIBLE
9	61127	61127	61127	61127	61127	O-RING, 3/8 ID x 1/2 OD
10	61221	61221	61221	61221	61221	FUNNEL
11	61223	61223	61223	61223	61223	ELBOW, HOPPER
12	61226	61226	61226	61226	61226	FITTING, FUNNEL, QUICK CNCT.
13	61228	61228	61228	61228	61228	SPACER
14	61255	61255	61255	61255	61255	SHROUD, STEAM RECOVERY
15	61372	61372	61372	61372	61372	HOPPER, ASSEMBLY OF 5LB.
16	61728	61728	61728	61728	61728	HOPPER, ASSEMBLY OF 8LB.
17	61618	61618	61618	61618	61618	MOTOR, 12VDC AUGER
18	61847	61846	61847	61846	61846	SWITCH, TOGGLE, 16A DPST
19	61116	61117	61116	61116	61117	MOTOR, WHIPPER
20	61124	61125	61168	61124	61125	LAMP, GREEN
21	05086	70271	61187	05086	70271	LAMP, RED
22	61316	61316	61316	61316	61316	AGITATOR, LOWER PINNHEEL
23	61721	61721	61721	61721	61721	AGITATOR, UPPER PINNHEEL
24	61241	61241	61241	61241	61241	DECAL, POWER ON/OFF
25	61242	61242	61242	61242	61242	DECAL, RINSE ON/OFF
26	61247	61247	61247	61247	61247	DECAL, POWER ON

PART NUMBERS						DESCRIPTION
NOTE NO.	120 VOLT	230V "E"	100V "J"	120/240V "Q"	200V "J"	
27	61248	61248	61248	61248	61248	DECAL, READY
28	61222	61222	61222	61222	61222	HOPPER, 5LB.
29	61642	61642	61642	61642	61642	HOPPER, 8LB.
30	61224	61224	61224	61224	61224	AUGER, STANDARD
31	61225	61225	61225	61225	61225	LINK, AUGER DRIVE
32	61230	61230	61230	61230	61230	DRIVESHAFT, AUGER SPRING
33	61315	61315	61315	61315	61315	COVER, 5LB. HOPPER
34	61313	61313	61313	61313	61313	SPRING, LWR. PINNHL. AGITR.
35	61733	61733	61733	61733	61733	SPRING, UPR. PINNHL. AGITR.
36	61461	61461	61461	61461	61461	BUTTON, RESTRICTOR ANGLED
37	61589	61589	61589	61589	61589	BUTTON, RESTRICTOR SOUP
38	61246	61246	61246	61246	61246	BEARING, DRIVESHAFT
39	61314	61314	61314	61314	61314	NUT, 5/8-11 UNC.
40	07301-04	07301-04	07301-04	07301-04	07301-04	WASHER, FLAT #10 SAE S.S.
41	61709	61709	61709	61709	61709	HARNES, HOPPER BRACKET
42	61157	61157	61157	61157	61157	PLUG, AMBIENT SWITCH HOLE
43	61460	61460	61460	61460	61460	BEARING, 1/4 ID x 5/16 OD
44	71155	71155	71155	71155	71155	TUBING, 5/16 ID x 3/32 WALL
45	61705	61705	61705	61705	61705	COVER, 8LB. HOPPER
46	N/A	07327	N/A	N/A	N/A	CLAMP, 5/8 ID HOSE
47	61734	61734	61734	61734	61734	SEAL, CLOSED CELL FOAM
48	61735	61735	61735	61735	61735	SEAL, HOPPER BKT.
49	61480	61480	61480	61480	61480	STRAIN RELIEF, HEYCO 1240
50	61437	61437	61437	61437	61437	SCREW, 6-32 10MM
51	60741	60741	60741	60741	60741	O-RING, 0.238 x 0.070
52	61847	61847	61847	61847	61847	SWITCH, SPST RMSE

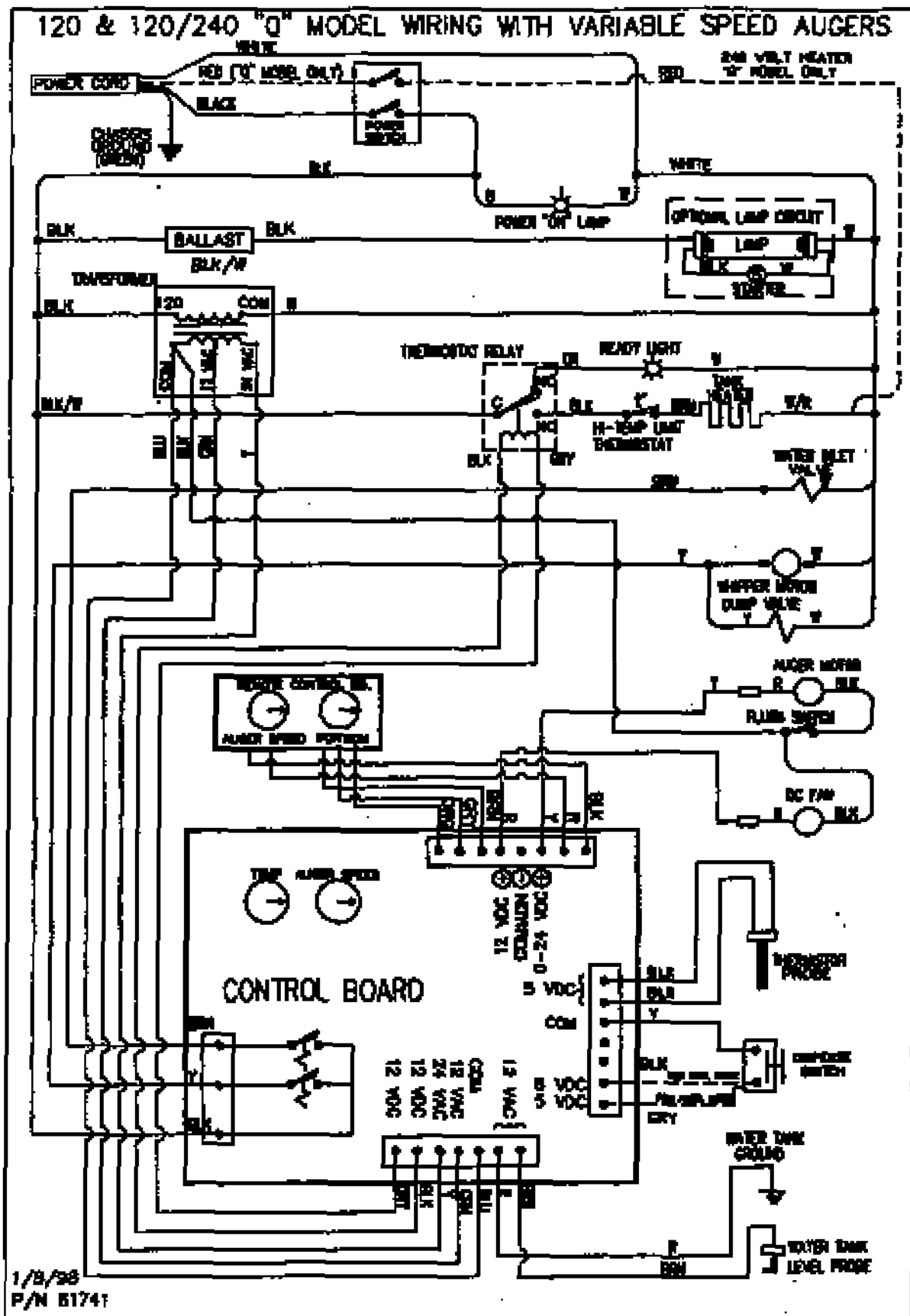
Door Assembly PIC-2-DC, PIC-3-DC, PSD-2 and PSD-3



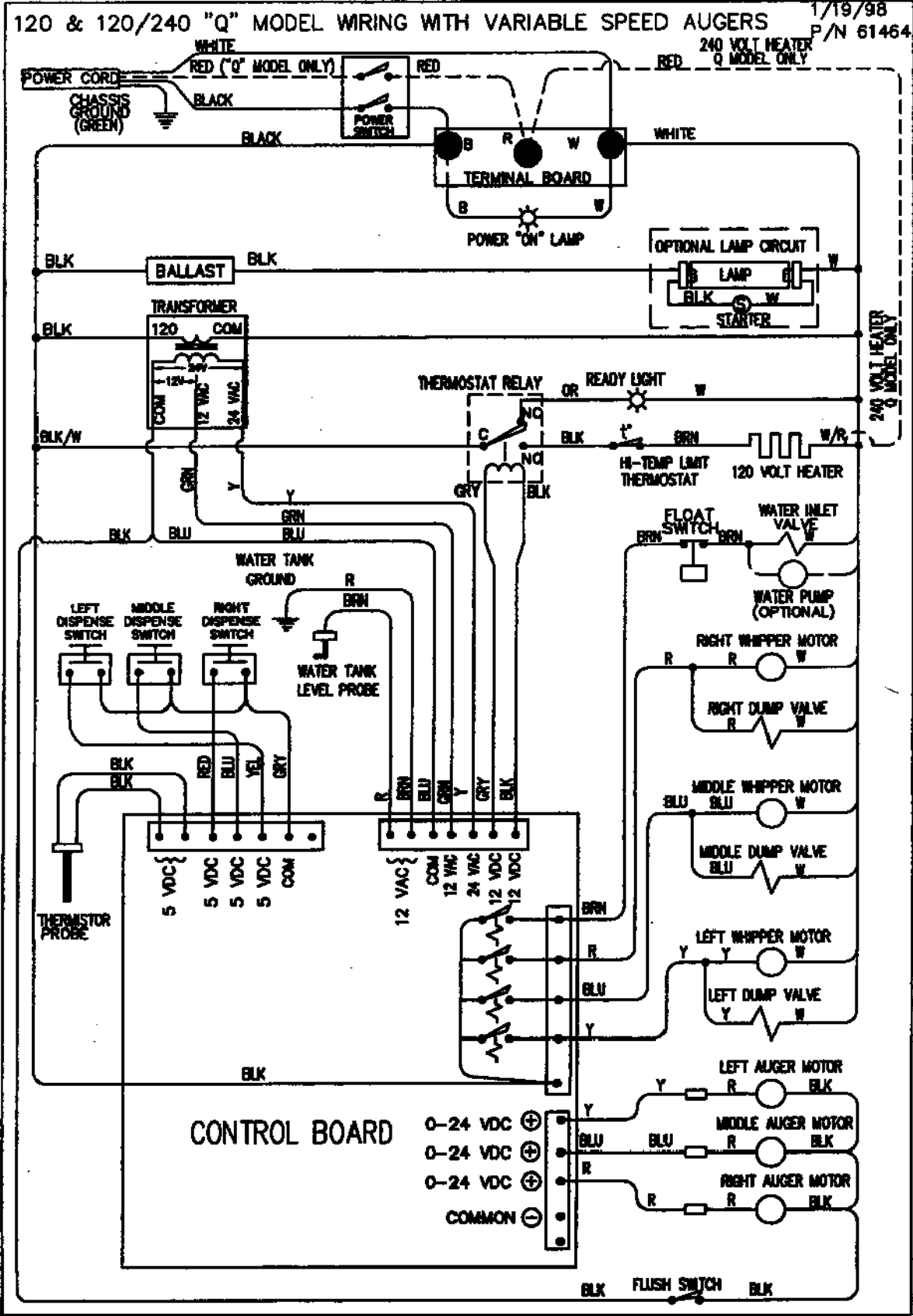
Door Assembly PIC-1-DC and PSD-1



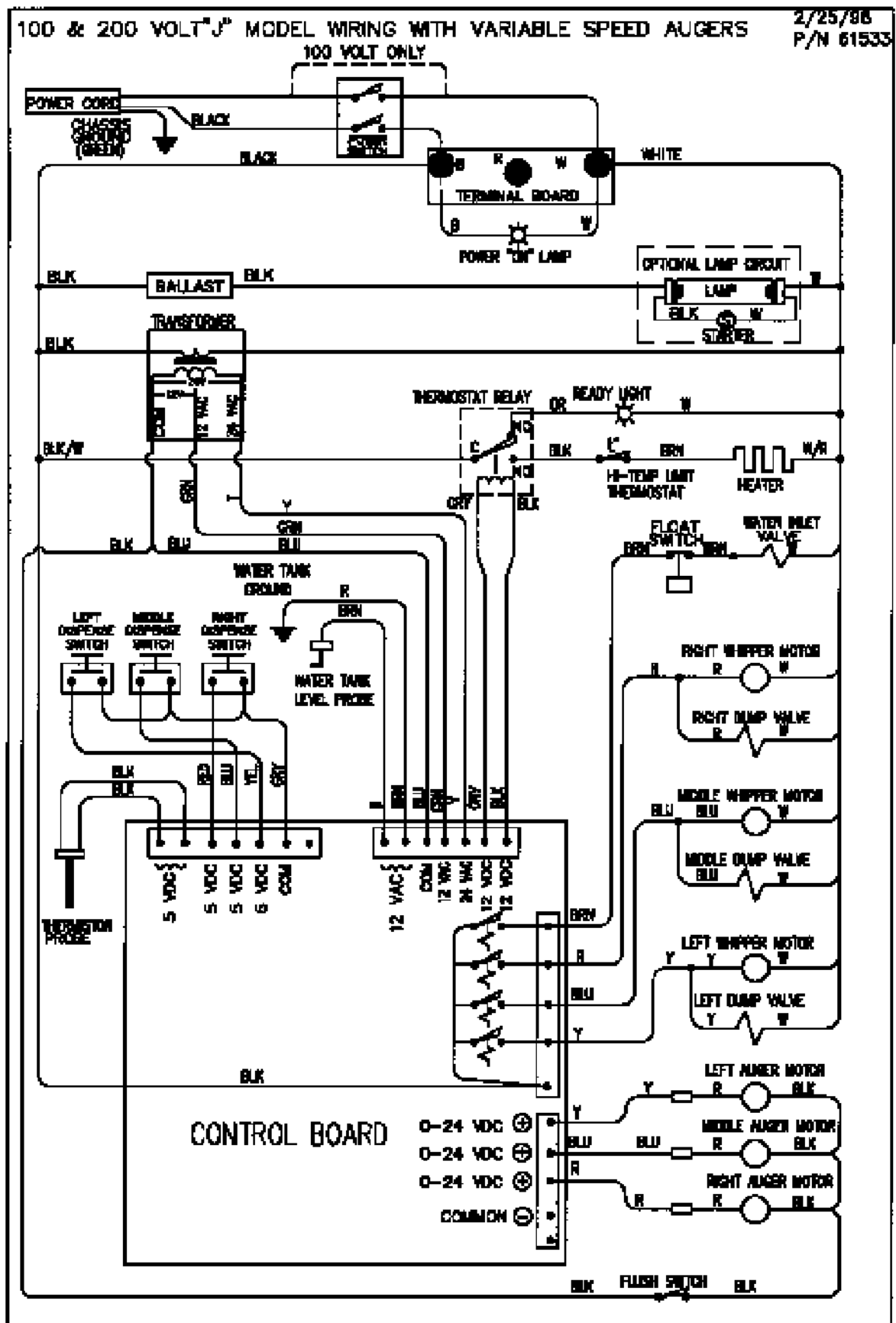
PIC-1-DC and PSD-1Wiring Diagram 120V and 120/240V (Q Models)



PIC-2 and PIC-3 Wiring Diagram 120V and 120/240V (Q Models)

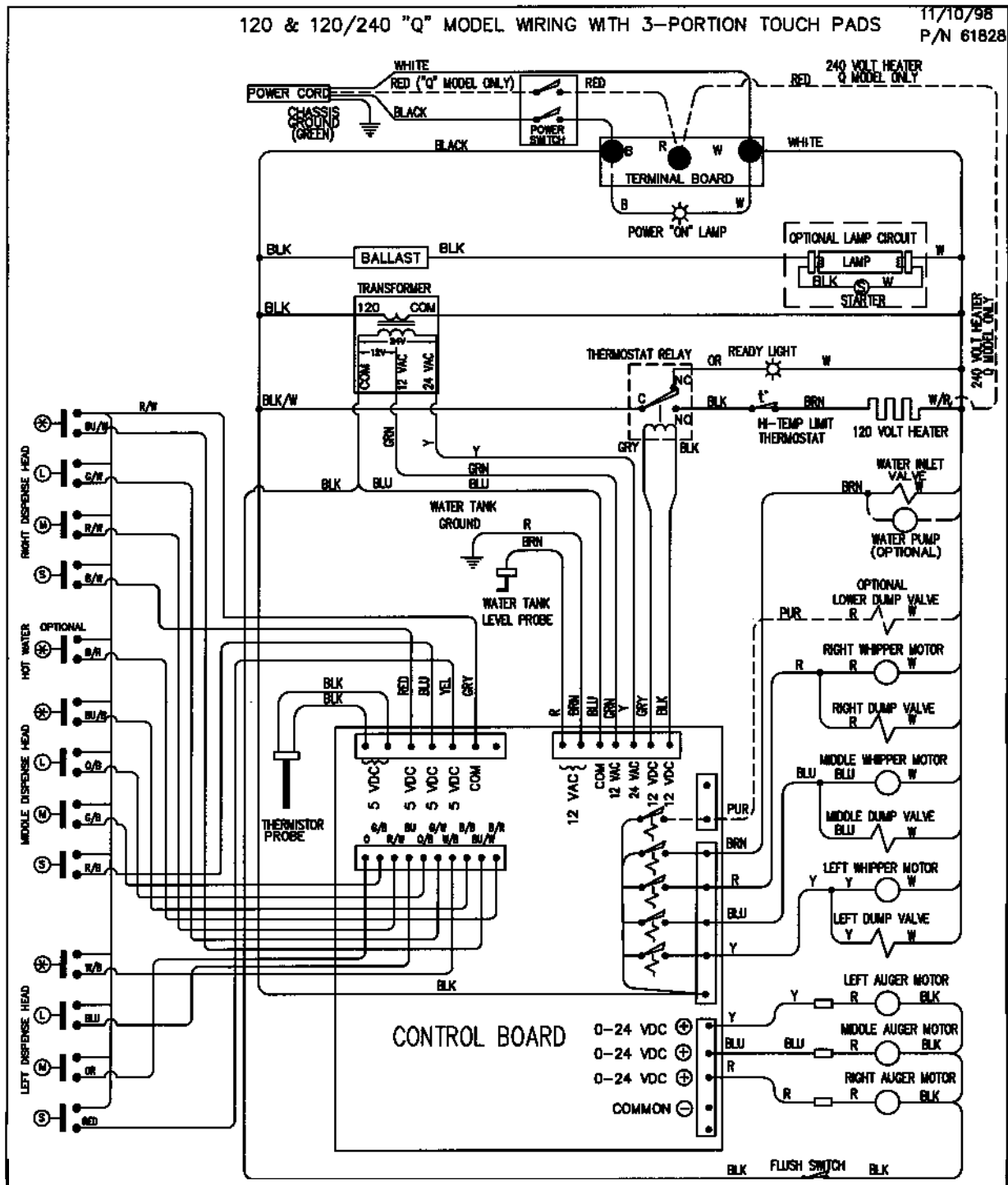


PIC-2J and PIC-3J Wiring Diagram 100 and 200 V



PIC-2-DC and PIC-3-DC Wiring Diagram 120V and 120/240V (Q Models)

(3 Portions per head)



PIC-2-DCJ and PIC-3-DCJ Wiring Diagram 100V & 200V

(3 Portions per head)

